

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ( Not for submission under 37 CFR 1.99)

Application Number	10575119
Filing Date	2006-05-16
First Named Inventor	Charles Cantor
Art Unit	1634
Examiner Name	Misook YU
Attorney Docket Number	701586-054202

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	5	20020025532		2002-02-28	Huang		

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	2	01/42496	WO	A2	2001-06-14	Pyrosequencing AB, et al.		<input type="checkbox"/>
	3	01/68913	WO		2001-09-20	Genset		<input type="checkbox"/>
	4	01/90399	WO	A2	2001-11-29	Dade Behring Inc.		<input type="checkbox"/>
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	1	AHMED et al., "Prenatal diagnosis of beta-thalassaemia in Pakistan: experience in a Muslim country" Prenatal Diagn 20(5):378-383, 2000.	<input type="checkbox"/>

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2	AMICUCCI, P. et al., "Prenatal diagnosis of myotonic dystrophy using fetal DNA obtained from maternal plasma." Clinical Chemistry 46(2):301-302, 2000.	<input type="checkbox"/>
3	BÖCKER, "SNP and mutation discover using base-specific cleavage and MALDI-TOF mass spectrometry." Bioinformatics 19(Suppl 1):i44-i53, 2003.	<input type="checkbox"/>
4	BRAUN et al., "Improved Analysis of Microsatellites Using Mass Spectrometry." Genomics 46:18-23, 1997.	<input type="checkbox"/>
5	CHEUNG, M. C. et al., "Prenatal diagnosis of sickle cell anaemia and thalassaemia by analysis of fetal cells in maternal blood." Nat Genet 14:264-268, 1996	<input type="checkbox"/>
6	CHIU, R. W. K. and LO, Y. M. D., "Application of fetal DNA in maternal plasma for noninvasive prenatal diagnosis." Expert Rev Mol Diagn 2:32-40, 2002.	<input type="checkbox"/>
7	CHIU, R. W. K. et al., "Noninvasive prenatal exclusion of congenital adrenal hyperplasia by maternal plasma analysis: a feasibility study." Clin Chem 48:778-780, 2002.	<input type="checkbox"/>
8	CHIU, R. W. K. et al., "Prenatal exclusion of beta thalassaemia major by examination of maternal plasma." The Lancet 360:998-1000, 2002.	<input type="checkbox"/>
9	CLARK, A. G. et al., "Inference of haplotypes from PCR-amplified samples of diploid populations." Mol Biol Evol 7 (2):111-122, 1990.	<input type="checkbox"/>
10	COSTA, J. M. et al., "New strategy for prenatal diagnosis of X-linked disorders." N Engl J Med 346:1502, 2002.	<input type="checkbox"/>
11	COSTA, J. M. et al., "First-trimester fetal sex determination in maternal serum using real-time PCR." Prenatal Diagn 21:1070-1074, 2001.	<input type="checkbox"/>
12	DALY, M. J. et al., "High-resolution haplotype structure in the human genome." Nat Genet 29:229-232, 2001.	<input type="checkbox"/>

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13	DING and CANTOR, "Direct molecular haplotyping of long-range genomic DNA with M1-PCR." PNAS 100 (13):7449-7453, 2003.	<input type="checkbox"/>
14	DORIS et al., "Quantitative analysis of gene expression by ion-pair high-performance liquid chromatography." J Chromatography A 806(1):47-60, 1998.	<input type="checkbox"/>
15	DOUGLAS, J. A. et al., "Experimentally-derived haplotypes substantially increase the efficiency of linkage disequilibrium studies." Nat Genet 28:361-364, 2001.	<input type="checkbox"/>
16	DRYSDALE et al., "Complex promoter and coding region beta 2-adrenergic receptor haplotypes alter receptor expression and predict in vivo responsiveness." PNAS 97(19):104483-10488, 2000.	<input type="checkbox"/>
17	ELSO et al., "Mutation Detection Using Mass Spectrometric Separation of Tiny Oligonucleotide Fragments." Genome Research 12:1428-1433, 2002.	<input type="checkbox"/>
18	FINNING, K. M. et al., "Prediction of fetal D status from maternal plasma: introduction of a new noninvasive fetal RHD genotyping service." Transfusion 42:1079-1085, 2002.	<input type="checkbox"/>
19	FUCHAROEN, G. et al., "Prenatal detection of fetal hemoglobin E gene from maternal plasma." Prenatal Diagn. 23:393-396, 2003.	<input type="checkbox"/>
20	FURLONG, R. A. et al., "Analysis of four microsatellite markers on the long arm of chromosome 9 by meiotic recombination in flow-sorted single sperm." Am J Hum Genet 52(6):1191-1199, 1993.	<input type="checkbox"/>
21	GABRIEL, S. B. et al., "The structure of haplotype blocks in the human genome." Science 296:2225-2229, 2002.	<input type="checkbox"/>
22	González-González M. C. et al., "Early Huntington disease prenatal diagnosis by maternal semiquantitative fluorescent-PCR." Neurology 60:1214-1215, 2003.	<input type="checkbox"/>
23	González-González M. C. et al., "Prenatal detection of a cystic fibrosis mutation in fetal DNA from maternal plasma." Prenatal Diagn 22(10):946-948, 2002.	<input type="checkbox"/>

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24	HEID et al., "Real time quantitative PCR." Genome Res 6(10):986-994, 1996.	<input type="checkbox"/>
25	HODGE et al., "Loss of information due to ambiguous haplotyping of SNPs." Nature Genet 21(4):360-361, 1999.	<input type="checkbox"/>
26	JACQUY et al., "A quantitative study of peripheral blood stem cell contamination in diffuse large-cell non-Hodgkin's lymphoma: one-half of patients significantly mobilize malignant cells." Br J Haematology 110(3):631-637, 2000.	<input type="checkbox"/>
27	JEFFREYS et al., "Amplification of human minisatellites by the polymerase chain reaction: towards DNA fingerprinting of single cells." Nucleic Acids Res 16(23):10953-10971, 1988.	<input type="checkbox"/>
28	JEFFREYS et al., "Repeat unit sequence variation in minisatellites: a novel source of DNA polymorphism for studying variation and mutation by single molecule analysis." Cell 60(3):473-485, 1990.	<input type="checkbox"/>
29	JUDSON, R. et al., "The predictive power of haplotypes in clinical response." Pharmacogenomics 1(1):15-26, 2000.	<input type="checkbox"/>
30	KREBS et al., "Genotyping of dinucleotide tandem repeats by MALDI mass spectrometry of ribozyme-cleaved RNA transcripts." Nature Biotechnology 19:877-880, 2001.	<input type="checkbox"/>
31	LO, Y. M. et al., "Quantitative analysis of fetal DNA in maternal plasma and serum: implications for noninvasive prenatal diagnosis." Am J Hum Genet 62:768-775, 1998.	<input type="checkbox"/>
32	LO, Y. M. et al., "Presence of fetal DNA in maternal plasma and serum." Lancet 350(9076):485-487, 1997.	<input type="checkbox"/>
33	LO, Y. M. Dennis et al., "Prenatal diagnosis of fetal RhD status by molecular analysis of maternal plasma." N Engl J Med 339:1734-1738, 1998.	<input type="checkbox"/>
34	LO, Y. M., "Detection of minority nucleic acid populations by PCR." J Pathol 174:1-6, 1994.	<input type="checkbox"/>

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35	NASIS, O. et al. "Improvement in sensitivity of allele-specific PCR facilitates reliable noninvasive prenatal detection of cystic fibrosis." Clin Chem 50:694-701, 2004.	<input type="checkbox"/>
36	RIJNDERS, R. J. et al., "Clinical applications of cell-free fetal DNA from maternal plasma." Obstet Gynecol 103:157-164, 2004.	<input type="checkbox"/>
37	SEKIZAWA, A. et al., "Accuracy of fetal gender determination by analysis of DNA in maternal plasma." Clin Chem 47 (10):1856-1858, 2001.	<input type="checkbox"/>
38	Suomalainen, A. and Syvänen, A. C., "Quantitative analysis of human DNA sequences by PCR and solid-phase minisequencing." Mol Biotechnol 15(2):123-131, 2000.	<input type="checkbox"/>
39	TANG, et al., "Single nucleotide polymorphism analyses by MALDI-TOF MS." International Journal of Mass Spectrometry 226:37-54, 2003.	<input type="checkbox"/>

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